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10/033,127	10/22/2001	Wolfgang Schonberger	A-2986	7101

7590

11/19/2003

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EXAMINER

HINZE, LEO T

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/033,127

Applicant(s)

SCHONBERGER, WOLFGANG

Examiner

Leo T. Hinze

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/22/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 7-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke et al., US 4,089,264 in view of Dini, US 3,964,386.

Jeschke teaches:

- an inking unit (Figure 1) in a printing press, comprising an ink-metering device (1) having at least one metering element (6) operatively engaging with a roller, said roller being one of an ink form roller and a roller operatively engaging with an ink form roller, and an oscillation device (11,13) assigned to said metering element for mounting said metering element so that it is oscillatable between: an engaging position and a spaced-away position with respect to the metering element; and a spaced-away position of said metering element in which said metering element is lifted to an outlet height wherein said metering element is lifted to an outlet height (e.g. col. 4, line 4) from said roller (claims 1, 10, and 12);

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- wherein said roller has a radial direction; and said oscillation device has a guide guiding said metering element in an oscillation direction deviating in a range from 0° to 20° in said radial direction of said roller (claim 2);
- an inking unit wherein said oscillation device has an electromagnetic (11, 13) oscillation drive drivingly connected to said metering element (claim 3);
- an inking unit wherein said oscillation device has a spring (15) for setting said metering element against said roller (claim 4);
- an ink-feeding device (8) disposed upline of said metering element alongside a peripheral line of said roller (claim 7);
- an inking unit including at least another metering element assigned to said roller (e.g. Figure 2, ref. 9) (claim 8);
- an inking unit wherein said metering elements are mounted alternately with one another for removal thereof from said roller (e.g. Figure 2) (claim 9);
- a printing press (col. 1, lines 1-2) (claim 10);
- controlling the frequency (e.g. col. 4, line 2) of oscillation of the metering element.

Jeschke does not teach:

- an outlet height of at least 20 micrometers and less than 40 micrometers (claims 1, 10, and 12);
- oscillation at a frequency within a range of 200 Hz to 10 kHz (claim 12).

Dini teaches a method and apparatus for removing surplus ink on printing cylinders, including:

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- an oscillating metering element (3);
- an oscillation frequency in the range of 5 to 200 kHz (col. 2, lines 45-47);
- an oscillation amplitude from 5 to 30 micrometers (col. 2, lines 52-53);
- that such an oscillation frequency is advantageous for creating a hydrodynamic barrier in the ink layer which blocks passage of all but a predetermined residual portion of the ink layer past the doctor blade edge (col. 1, lines 64-68);
- the invention is applicable to any situation where it is desired to control the thickness of a liquid layer applied to a surface (col. 4, lines 62-64);
- the invention is advantageous for eliminating uneven wiping off of surplus ink due to non-uniform coordination of the positions of the doctor blade and the cylinder (col. 1, lines 34-37) and in eliminating inconsistency of tone reproduction of printings (col. 1, lines 45-47).

Regarding claims 1, 10, and 12, it would have been obvious to one having ordinary skill in the art to modify Jeschke to change the oscillation amplitude to 5-30 micrometers, because Dini teaches that this oscillation amplitude is advantageous for eliminating uneven wiping off of surplus ink due to non-uniform coordination of the positions of the doctor blade and the cylinder and in eliminating inconsistency of tone reproduction of printings, and such an oscillation amplitude creates a hydrodynamic barrier in the ink layer which blocks passage of all but a predetermined residual portion of the ink layer past the doctor blade edge.

Further regarding claim 12, it would have been obvious to one having ordinary skill in the art to modify Jeschke to have an oscillation frequency within a range of 200 Hz to 10kHz,

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because Dini teaches that such an oscillation frequency is advantageous for eliminating uneven wiping off of surplus ink due to non-uniform coordination of the positions of the doctor blade and the cylinder and in eliminating inconsistency of tone reproduction of printings.

Regarding claims 2-4 and 7-9, the combination of Jeschke and Dini teaches all that is claimed as discussed above.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke in view of Dini as applied to claims 1-4, 7-10, and 12 above, and further in view of Cappel et al., US 3,913,479.

The combination of Jeschke and Dini teaches all that is claimed as discussed in the rejection of claims 1-4, 7-10, and 12 above, including wherein said metering element is a metering blade having a working region terminating in a cutting edge (Jeschke, 7).

The combination of Jeschke and Dini does not teach said working region of said metering blade having a cross section thickness which remains constant.

Cappel teaches wherein said metering element is a metering blade (75) having a working region terminating in a cutting edge, said working region of said metering blade having a cross-section thickness which remains constant (Figure 3). Cappel teaches that such a blade as part of the system is advantageous for reducing construction costs and for operating for long periods substantially free of maintenance problems (col. 1, lines 38-43).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke wherein said working region of said metering blade has a cross-section thickness that remains constant, because Cappel teaches that such a

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metering blade is advantageous for reducing construction costs and for operating for long periods substantially free of maintenance problems.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke in view of Dini as applied to claims 1-4, 7-10, and 12 above, and further in view of Olawsky et al., US 5,842,416.

The combination of Jeschke and Dini teaches all that is claimed as discussed in the rejection of claims 1-4, 7-10, and 12 above, except at least one glazing roller disposed downline from said metering element along a peripheral line of said roller, said glazing roller being exclusively in rolling contact with said roller.

Olawsky teaches a rider roller thrown onto a roller downstream from a doctor blade (e.g. col. 1, lines 36-40), and that this roller is advantageous for smoothening the ink film before the ink is applied to the inking form (col. 1, lines 36-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke to include at least one glazing roller disposed downline from said metering element along a peripheral line of said roller, said glazing roller being exclusively in rolling contact with said roller, because Olawsky teaches that a glazing roller is effective for smoothening of the ink film before the ink is applied to the inking form.

#### ***Response to Arguments***

5. Applicant's arguments, see pages 6-14, filed 8 September, 2003, with respect to the rejection(s) of claim(s) 1-10 and 12 under 35 USC § 103 have been fully considered and are

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persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

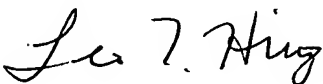
*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fadner, US 5,121,689, Lorenz et al., US 3,389,655., and Ljungquist, US 3,087,184 each teach vibrating doctor blade means having obvious similarities to the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (703) 305-3339. The examiner can normally be reached on M-F 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0952.



Leo T. Hinze  
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14 November, 2003



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